DOCUMENT RESUME

ED 029 131 VT 008 234

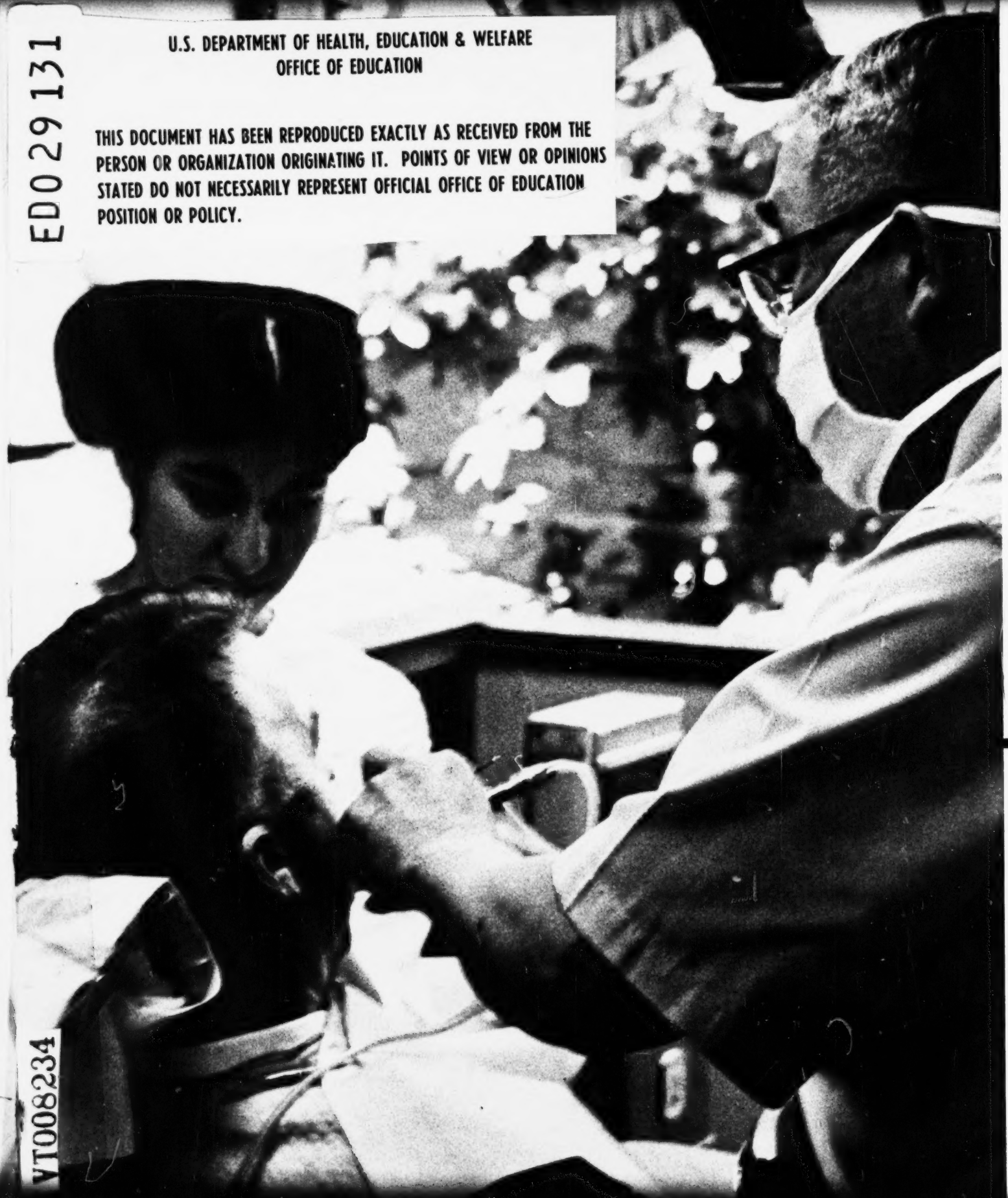
A Model Program for Dental Assisting Education in California.
California State Dept. of Education, Sacramento. Bureau of Industrial Education.; California Univ., Los Angeles. Div. of Vocational Education.
Pub Date 68
Note-37p.
EDRS Price MF-$0.25 HC-$1.95
Descriptors-*Curriculum Guides, *Dental Assistants, *Health Occupations Education, Post Secondary Education, Program Content
Identifiers-*California

Intended to provide assistance for developing new programs and improving existing ones, the guide was constructed by dental assisting instructors and other professional participants in a 196 5 workshop conference. Elements of the model program were derived from a statistical analysis of California junior colleg e programs in dental assisting and include courses in the major area of dental assisting, related fields, and general education. Behavioral objectives and content outlines are presented for seven subject matter fields: (1) introduction to dental assisting, (2) bio-dental sciences, (3) dental materials, (4) practice administration, (5) radiography, (6) operatory procedures, and (7) laboratory procedures. Objectives and content outlines are also included for supervised clinical experience. The sequence of instruction is considered an individual school perogative. Recommendations include: (1) the program setting of a collegiate institution and the conferring of an associate degree, (2) approximately equal amounts of general education related courses and of specialized courses, (3) clinical experience in dental schools, clinics o r hospitals, and private offices, and (4) appointment of an advisory committee of dentists and dental assistants. (JK)

ED029131

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.



VT008234

A Model Program for Dental Assisting Education in California

CALIFORNIA STATE DEPARTMENT
OF EDUCATION
BUREAU OF INDUSTRIAL EDUCATION

in cooperation with

DIVISION OF VOCATIONAL EDUCATION
UNIVERSITY OF CALIFORNIA

1968

Foreword

A Model Program for Dental Assisting Education in California is intended to provide a guide for the development of new programs or for improvement of existing programs of dental assisting. It was constructed and edited by dental assisting instructors and other professional participants at the Dental Assisting Workshop and Educational Conference held at the Asilomar Conference Grounds, Pacific Grove, California, in August, 1965. The project was planned and conducted by the Bureau of Industrial Education in cooperation with the Division of Vocational Education at the University of California under the direction of Lee D. Bodkin with the assistance of Edgar Smith and G. F. Peters. Final refinements were made to the curriculum and unit objectives at a workshop at the University of California Conference Center, Lake Arrowhead, in August, 1967, under the direction and guidance of Richard L. Lano and David Allen.

The elements for this model program were derived from a statistical analysis and may be viewed as a normative measure of current curricular content in the California junior college classes in dental assisting.

It is organized by subject matter; the chronological sequence of instruction being an individual school prerogative.

A series of performance criteria (also referred to as "behavioral objectives") were developed in August, 1967, at a conference at Lake Arrowhead, California. Groups of dentists, dental assistant instructors and educators were assigned dental assisting curriculum "blocks" and challenged to develop instructional objectives similar, in essence, to those formulated by Mager:[5] identify the nature of the expected student performance, define the conditions under which the performance is to take place, and state the standards of competence that is expected.

The "model" includes generous samples of performance criteria statements. Knowledgeable dental assisting instructors will use, refine, and expand on those statements as the individual program is implemented.

Richard S Nelson

RICHARD S. NELSON, Chief
Bureau of Industrial Education

Acknowledgments

Appreciation is expressed to the following persons who comprised the Dental Assisting State Educational Advisory Committee:

Nathan H. Boortz, Ed. D.	Chairman of the Committee, Director of Technical Education Foothill Junior College District, and representative of the California Junior College Association
Mrs. Pauline Anderson, CDA, MA	Instructor of Dental Assisting, Pasadena City College
C. W. Gilman, DDS	Past President, Southern California Dental Association
Mrs. Shirley Leonhardt, CDA	Instructor of Dental Assisting, Mesa College, San Diego
Jack Rosenberg, DDS, MA	Director of Counseling, School of Dentistry, University of the Pacific
E. H. Smith, DDS	Past President, California Dental Association
Mrs. Hazel Torres, CDA	Coordinator of Dental Assisting, College of Marin, Kentfield

Contents

Sample Dental Assisting Curriculum 1

Recommended Courses and Units 2

Introduction to Dental Assisting 3

Bio-Dental Sciences 7

Dental Materials 11

Practice Administration 13

Dental Radiography 18

Dental Operatory Procedures 21

Dental Laboratory Procedures 26

Supervised Clinical Experience 31

Summary and Recommendations 34

References 36

A.A. or A.S. Degree

Prerequisites: Admission to the Dental Assisting program is based upon completion of high school courses in biology and typing or equivalent, satisfactory performance on college abilities tests and a personal interview. Deviation from course prerequisites subject to individual evaluation.

SEMESTER I

	Units
DA 50-Intro. to Dental Assisting	2
DA 52A-Bio-dental Sciences	3
Business	3
Communications I	3
Natural Science	4
P.E.	1/2
Totals	15-1/2

SEMESTER II

	Units
DA 52B-Bio-dental Sciences	3
DA 54-Dental Materials	2
DA 56-A-Practice Administration	2
Communications II	3
Elective	3
P.E.	1/2
Totals	16-1/2

SEMESTER III

	Units
DA 60A-Dental Radiography	2
DA 62A-Dental Operatory Procedures	3
DA 64A-Dental Laboratory Procedures	2
DA 70A-Supervised Clinical Experience	2
Psychology	3
Social Science	3
P.E.	1/2
Totals	15-1/2

SEMESTER IV

	Units
DA 56B-Practice Administration	3
DA 60B-Dental Radiography	2
DA 62B-Dental Operatory Procedures	2
DA 64B-Dental Laboratory Procedures	2
DA 70B-Supervised Clinical Experience	2
Fine Arts/Literature Elec.	3
P.E.	1/2
Totals	14-1/2

Curriculum Total = 62 Units

SAMPLE DENTAL ASSISTING CURRICULUM

RECOMMENDED COURSES AND UNITS

Major Courses		Sem. Units	Hours/Week Lect.	Lab.	Total	Total Hours
D.A. 50	Intro to Dental Assisting	2	2	0	2	36
D.A. 52A,B	Bio-dental Sciences	6	- 8 -		8	144
D.A. 54	Dental Materials	2	1	3	4	72
D.A. 56A,B	Practice Administration	5	- 8 -		8	144
D.A. 60A,B	Dental Radiography	4	2	5	7	126
D.A. 62A,B	Dental Operatory Procedures	5	3	6	9	165
D.A. 64A,B	Dental Laboratory Procedures	4	2	5	7	126
D.A. 70A,B	Supervised Clinical Experience	4	1	10	11	198
		32				1011

Related Courses	Semester Units
Business (e.g., typing, bookkeeping, business correspondence personal development)	2 - 5
Communication, oral and written	6
Natural Science (e.g., biology, chemistry, fundamentals of biochemistry)	3 - 6
Applied Psychology	3
Total Related	14 - 20

General Education including State and Local Requirements:

E.g.: Fine Arts, Health, Literature, Physical Education, Political Science, Sociology	10 - 19
Total Gen. Educa.	10 - 19

Curriculum Total = 60-65 Units

DA 50 INTRODUCTION TO DENTAL ASSISTING 2 Units

Prerequisites: Admission to Dental Assisting Program.

History of dentistry, dental practices, professional organization, ethics, terminology, health and grooming, employment and job demands.

Lecture -- 2 hours

Objectives: To orient dental assisting students to the profession of dentistry through lecture, discussion, field trips, laboratory experience, and research.

Unit A. History

Objectives: The student will be able to demonstrate her knowledge of the history of the dental profession including dental assisting, areas of employment opportunities, and the growth of the dental health team by:

1. Responding to in-class discussion questions in a manner acceptable to the instructor.
2. Achieving a satisfactory score on written examinations.
3. Writing annotations of assigned research in a format and manner described in the assignment sheet and later making a class-front presentation of the information for the purpose of gaining speaking experience.

Topic 1. The Dental Profession
- a. Significant events
- b. Current and future trends
- c. Educational standards

Topic 2. The Dental Assistant
- a. Significant events
- b. Current and future trends
- c. Educational standards

Topic 3. Areas of Practice
- a. General practice
- b. Specialties
  - (1) endodontics
  - (2) oral pathology
  - (3) oral surgery
  - (4) orthodonics
  - (5) pedodontics
  - (6) periodontics
  - (7) prosthodontics
  - (8) public health

INTRODUCTION TO DENTAL ASSISTING

c. Armed Forces, federal and other health services
d. Teaching
e. Research

Topic 4. Growth of the Dental Health Team
a. The dentist
b. Paradental personnel

Unit B. Professional Organizations

Objectives: The student will participate actively in local and state dental assistant associations by:

1. Belonging, attending, and participating in regularly scheduled meetings, and
2. Relating any new concepts and innovations in dentistry to the student group.

Topic 1. Objectives, Structures, Functions, and Responsibilities
a. A.D.A. (American Dental Association)
b. A.D.A.A. (American Dental Assistants Association)
(1) C.B.A.D.A.A. (Certifying Board American Dental Assistants Association)
c. A.D.H.A. (American Dental Hygiene Association)
d. N.A.C.D.L. (National Association of Certified Dental Laboratories)
e. Allied groups

Unit C. Principles of Ethics

Objectives: The student will demonstrate by actions in her daily activities the recommended code of ethics as prescribed by the American Dental Association and the American Dental Assistants Association, and identified and evaluated by the dental assisting instructor.

Topic 1. Internal Relationships
a. Personnel
b. Professional conduct

Topic 2. External Relationships
a. Patient
b. Allied groups
c. Professional conduct

Unit D. Terminology

Objectives: From a designated list of terms, the student in her activities will effectively utilize terminology for specific areas of dentistry in daily communication and in the application of dental office procedures.

Topic 1. Physiological
a. Prefixes and suffixes
b. Basic sciences

Topic 2. Mechanical
a. Operatory
b. Laboratory

Topic 3. Dental Procedures

Topic 4. Business Management

Unit E. Health and Grooming

Objectives: The student will exemplify the ultimate in professional grooming and proper attire as prescribed by the American Dental Assistants Association.

Topic 1. Personal Health
a. Physical
b. Mental

Topic 2. Personal Care and Cleanliness

Topic 3. Dress
a. Professional
b. Personal attire

Unit F. Employment and Job Demands

Objectives: The student will contrast the responsibilities for employment with regard to the demands of physical, mental, and emotional health as well as safety practices required by current local employment conditions for the area served, and as discussed, viewed, and compared with the activities of the dental practice.

Topic 1. Physical Demands
a. Optimum health

Topic 2. Aptitudes and Dexterity
a. Basic intelligence
b. Coordination

Topic 3. Personal Attributes
a. Honesty, tact, and loyalty
b. Attitudes
c. Personality
d. Flexibility, adaptability
e. Initiative, motivation
f. Oral and written communication skills

Topic 4. Interpersonal Relationships
- a. Working agreements
- b. Employer rights
- c. Employee rights

Topic 5. Safety Standards
- a. Office personnel
- b. Patients

INTRODUCTION TO DENTAL ASSISTING

DA 52A BIO-DENTAL SCIENCES 3 Units

Prerequisites: Admission to Dental Assisting Program.

Introduction to general anatomy, head and neck, teeth and supporting structures, diet and nutrition related to dental health.

Lecture-Laboratory -- 4 hours

Objectives: To develop a basic knowledge of gross anatomy, diet and nutrition with emphasis on the areas of dental anatomy.

Unit A. Introduction to General Anatomy

Objectives: The student will be able to define general anatomical terms and identify major systems of the body, according to information given in the text.

Topic 1. General Anatomical Terms

Topic 2. Major Systems of the Body

Unit B. Anatomy and Physiology of the Head and Neck

Objectives: By using charts, models and diagrams, the student will be able to identify and describe the functions of the oral cavity, bones of the skull, muscles of mastication, glands, nerves and blood vessels.

Topic 1. Oral Cavity
a. Soft tissues
b. Teeth

Topic 2. Bones of the Skull
a. Cranium
b. Face
c. Mandible

Topic 3. Muscles

Topic 4. Glands
a. Salivary
b. Lymphatic

Topic 5. Nerves

Topic 6. Blood Vessels

BIO-DENTAL SCIENCES

Unit C. The Teeth and Supporting Structures

Objectives: The student will be able to (1) present chronologically the growth and development of the face, teeth and supporting structures including histology of same; and (2) identify the surfaces and landmarks of the teeth and explain the functions of the dental arches according to the text provided.

Topic 1. Embryology, Growth and Development
a. Face and nose
b. Tongue and palate
c. Chronology of eruption

Topic 2. Histology
a. Tissues of supporting structures
b. Tissues of the tooth

Topic 3. Morphology
a. Surfaces and landmarks
b. Function of dental arches

Unit D. Diet and Nutrition as Related to Dental Health

Objectives: The student will be able to identify the eight basic foods and the elements composing the substance as related to diet and nutrition in dental health.

Topic 1. Metabolism

Topic 2. General Health

Topic 3. Dental Health

DA 52B BIO-DENTAL SCIENCES 3 Units

Prerequisites: DA 50, 52A

Introduction to microbiology, sterilization and disinfection, pathology of hard and soft tissues, and pharmacology.

Lecture-Laboratory -- 4 hours

Objectives: To expand the student's knowledge of microbiology, effects of sterilization, the involvement of pathological conditions as related to the hard and soft tissues of the oral cavity, and to develop an appreciation of the derivation and effects of dental therapeutics.

Unit A. Introduction to Microbiology

Objectives: The student will be able to classify and identify microorganisms and understand their transmission and control, according to the instructions relating to dental procedures.

Topic 1. Microorganisms
a. Classification
b. Identification
c. Transmission
d. Control

Unit B. Sterilization and Disinfection

Objectives: The student will be able to demonstrate the methods and techniques of sterilization and disinfection according to the standards established by the Department of Health, Education, and Welfare.

Topic 1. Methods

Topic 2. Techniques

Unit C. Pathology of Soft and Hard Tissues

Objectives: By using visual aids and texts the student will be able to recognize the differences between certain pathological conditions of soft and hard tissues, and identify the steps of tissue repair.

Topic 1. Etiology
a. Congenital and hereditary
b. Acquired

Topic 2. Treatment and Tissue Repair

BIO-DENTAL SCIENCES

Unit D. Pharmacology

Objectives: The student will be able to recognize and identify drugs and preparations used and associated with dental treatment and demonstrate the use, care and storage of medicaments according to regulations of the Food and Drug Administration.

Topic 1. Introduction
- a. History
- b. Vocabulary

Topic 2. Classification of Drugs
- a. Source of information
- b. Sources of drugs
- c. Types

Topic 3. Administration of Drugs
- a. Methods

Topic 4. Effects of Drugs
- a. Reactions
- b. Antidotes

Topic 5. Application in Dental Conditions
- a. Indications

Topic 6. Legal Aspects

Topic 7. Prescriptions

Topic 8. Care and Storage

DA 54 DENTAL MATERIALS 2 Units

Prerequisites: DA 50, 52B (may be taken concurrently)

Basic physical and chemical properties of dental materials, classification of materials--gypsum products, impression materials, cements, metals, porcelains, abrasives, chemicals.

Lecture -- 1 hour
Laboratory -- 3 hours

Objectives: To develop knowledge of the physical and chemical properties of dental materials. To provide an understanding of the proper utilization of dental materials.

Unit A. Introduction

Objectives: The student will be able to differentiate and discuss dental materials by chemical formula and their physical properties relating to ADA specifications.

Topic 1. Basic Physical and Chemical Properties of Dental Materials
a. Measurement systems
b. Classification and laws of mass and matter
(1) liquids
(2) solids
(3) gases
c. Natural forces and reactions
d. Atomic structure and ionic theory

Unit B. Classification of Dental Materials

Objectives: The student will be able to identify and manipulate the following materials according to the manufacturers' directions: (1) gypsum products, (2) impression materials, (3) cements, (4) metals, (5) porcelain, (6) abrasives, (7) chemicals.

Topic 1. Gypsum Products

Topic 2. Impression Materials
a. Colloids
b. Compounds and waxes
c. Rubber base--silicones

Topic 3. Cements
a. Zinc oxide-Eugenol
b. Zinc phosphate
c. Silicate
d. Acrylic

Topic 4. Metals
- a. Pure
- b. Alloys
- c. Amalgams

Topic 5. Porcelains

Topic 6. Abrasives

Topic 7. Chemicals

DENTAL MATERIALS

DA 56A PRACTICE ADMINISTRATION 2 Units

Prerequisites: DA 50, 52A

Jurisprudence; human relations; psychology; office procedures including reception duties, telephone technique, bookkeeping, correspondence and filing. Visits to private dental offices with participation in selected office activities.

Lecture-Laboratory -- 4 hours

Objectives: 1. The student will be capable of demonstrating appreciation of the legal necessity of maintaining accurate records.

2. The student will demonstrate understanding and respect for the Code of Ethics pertaining to the dental and dental assisting professions by satisfactorily completing a test on the subject matter.

Unit A. Jurisprudence

Objectives: The student will demonstrate her knowledge of ADA and ADAA ethics; malpractice, moral and legal responsibilities of the dental office according to the State Dental Practice Act and applicable State and National Statutes by completing a written examination to the satisfaction of the instructor.

Topic 1. Ethics
a. Principles A.D.A.
b. Code A.D.A.A.
c. State Dental Practice Act

Topic 2. Malpractice--Moral and Legal Responsibility
a. Dentist
b. Paradental personnel
c. Patient
d. Records

Topic 3. Legislation
a. State Labor Code
b. Workmen's Compensation
c. Unemployment Insurance
d. Health and Safety
e. Social Security

PRACTICE ADMINISTRATION

Unit B. Human Relations

Objectives:
1. The student will demonstrate her knowledge of telephone techniques by completion of role playing situations in accordance with the guide book of the telephone company.
2. The student will demonstrate her knowledge of reception duties to the satisfaction of the instructor.

Topic 1. Patient Oriented

Topic 2. Paradental Personnel

Topic 3. Intraprofessional

Topic 4. Interprofessional

Unit C. Office Procedures

Objectives:
1. The student will demonstrate her knowledge of telephone techniques by completion of two role playing situations in accordance with the guide book of the telephone company.
2. The student will demonstrate her knowledge of reception duties by correctly listing duties found on the instructor's assignment sheet.

Topic 1. Telephone Techniques

Topic 2. Reception Duties

Topic 3. Forms
- a. Patient records
  - (1) acquaintance
  - (2) case history
  - (3) charting
  - (4) treatment
  - (5) financial
- b. Office records
  - (1) appointment book
  - (2) appointment card
  - (3) day sheet
  - (4) receipt book
  - (5) ledger
  - (6) check book

Topic 4. Appointment Control
- a. Time
- b. Patient
- c. Operative procedure

Topic 5. Bookkeeping: Manual, Machine, and Data Processing
a. Daily entries
b. Weekly summary
c. Monthly summary
d. Yearly summary

PRACTICE ADMINISTRATION

DA 56B PRACTICE ADMINISTRATION 3 Units

Prerequisites: DA 56A

Continuation of DA 56A. Emphasizes banking procedures, credit and collections, insurance forms, supplies and inventory control.

Lecture-Laboratory -- 4 hours

Objectives: The student will demonstrate competency in the completion of collection letters, patient prepaid insurance forms, maintenance of a supply and inventory file system.

Unit A. Banking

Objectives: The student will be able to demonstrate her ability in dental office procedures and records by satisfactory completion of all commonly used records according to the instructors satisfaction.

Topic 1. Banking Procedure
- a. Forms
- b. Statement reconciliation

Topic 2. Financial Arrangements
- a. Office plans
- b. Bank plans

Topic 3. Credit and Collections

Topic 4. Office Correspondence
- a. Incoming
- b. Outgoing

Topic 5. Files
- a. Business
  - (1) current
  - (2) closed
  - (3) equipment
  - (4) insurance
  - (5) taxes
- b. Patient
  - (1) active
  - (2) inactive
  - (3) recall
  - (4) X ray

Unit B. Insurance

Objectives: The student will identify and demonstrate her ability to complete pre-paid dental care forms according to the specifications of the organizations involved.

Topic 1. Terminology

Topic 2. Types of Insurance
- a. State
  - (1) Workmen's Compensation
  - (2) Medicare and Medicaid
- b. Union
- c. Private
  - (1) pre-paid
  - (2) post-paid

Topic 3. Types of Forms
- a. Charting
- b. Form completion
  - (1) qualifications
  - (2) limitations
  - (3) billing
  - (4) treatment
  - (5) coverage

Unit C. Supplies and Inventory

Objectives: The student will be able to identify supplies, verify and route invoices, and compile and maintain an inventory according to general dental office procedures.

Topic 1. Supplies
- a. Types
- b. Storage
- c. Sources

Topic 2. Inventory Control
- a. Ordering
- b. Indexing
- c. Receiving
- d. Repair and replacement

DENTAL RADIOGRAPHY

DA 60A DENTAL RADIOGRAPHY 2 Units

Prerequisites: DA 52A, 52B

History, principles, biological effects of radiation, protection, films, exposure and processing techniques, and mounting.

Lecture -- 1 hour
Laboratory -- 3 hours

Objectives: To acquire basic knowledge and develop skill in application of radiology in the dental office.

Unit A. History

Objectives: The student will be able to demonstrate knowledge in history of X ray in dentistry through accuracy in testing of subject matter.

Topic 1. Discovery of X Ray

Topic 2. Application of X Ray to Dentistry

Unit B. Principles and Properties

Objectives: The student will be able to identify and demonstrate the function of component parts of the dental X-ray equipment to the satisfaction of the instructor.

The student will be able to explain the properties and principles of the emission of the rays by passing of formal testing on subject matter established by the instructor.

Topic 1. Characteristics

Topic 2. Production of X Rays
a. Control factors (ma-kvp)
b. Control devices

Unit C. Biological Effects of Radiation

Objectives: The student will demonstrate knowledge of the biological effects of radiation by satisfactory completion of an examination with accuracy in the subject matter.

Topic 1. Maximum Dosage
a. Patient
b. Operator

Topic 2. Over-Radiation

Unit D. Protection

Objectives: According to the standards of the Department of Health Radiation Code for the State of California, the student will be able to demonstrate knowledge of protection techniques in the use of dental X-ray equipment.

Topic 1. California Radiation Safety Code

Topic 2. Patient

Topic 3. Operator

Unit E. Dental Films

Objectives: The student will be able to identify and describe the composition, speed, types, care and storage of dental X-ray film according to the standards of the specific film manufacturer.

Topic 1. Composition

Topic 2. Speed

Topic 3. Types

Topic 4. Care and Storage

Unit F. Technique of Exposure

Objectives: The student will be able to demonstrate the accepted techniques of patient positioning, film placement, angulation, and exposure to obtain desired density according to dental practice standards.

Topic 1. Bisection of Angle

Topic 2. Paralleling

DENTAL RADIOGRAPHY

DA 60B DENTAL RADIOGRAPHY 2 Units

Prerequisites: DA 60A

Continuation of DA 60A. Emphasizes quality of films, exposure and processing techniques and evaluation.

Lecture -- 1 hour
Laboratory -- 2 hours

Objectives: To develop advanced knowledge in the technique of dental radiography, skill in the production of intra- and extra-oral films. To develop ability to evaluate quality of films produced.

Unit A. Processing

Objectives: The student will be able to:

1. Identify and demonstrate operation of various darkroom apparatus and equipment according to the manufacturer's recommended procedures.
2. Explain the properties and effects of the processing solutions.
3. Demonstrate the processing procedure of the film according to the manufacturer's specific recommendations.

Topic 1. Darkroom Facilities

Topic 2. Chemical Solutions

Topic 3. Procedure

Unit B Mounting

Objectives: The student will be able to mount processed dental X-ray films according to acceptable dental practice standards.

Topic 1. Methods

Topic 2. Care of Mounted Film

Unit C. Evaluation

Objectives: The student will be able to accurately identify landmarks, exposure faults, processing faults of dental X-ray films according to accepted dental standards.

Topic 1. Landmarks

Topic 2. Exposure Faults

Topic 3. Processing Faults

DA 62A DENTAL OPERATORY PROCEDURES 3 Units

Prerequisites: DA 52B, 54

Pre-operative procedures; instruments; function, care and maintenance of instruments and equipment; patient care; introduction to operative and post-operative procedures including sterilization procedures.

Lecture -- 2 hours
Laboratory -- 3 hours

Objectives: To prepare the dental assisting students to assist the dentist efficiently in all phases of dental procedures in the operatory.

Unit A. Pre-operative Procedures

Objectives: The student will be able to explain and identify usage and care of pre-operative instruments as required in the general dental practice.

Topic 1. Instruments
a. Identification of hand and rotary instruments

Topic 2. Function of Hand and Rotary Instruments

Topic 3. Basic Tray Set-up
a. How to set up basic tray

Topic 4. Passing and Receiving Instruments
a. How to pass and receive instruments

Topic 5. Care of Instruments
a. How to sharpen instruments

Unit B. Equipment

Objectives: The student will be able to explain the principle and demonstrate the operation, use, and maintenance of dental equipment routinely used in general practice in accordance with the manufacturer's recommendations.

Topic 1. Dental Unit
a. How to care for and maintain the dental unit

Topic 2. Handpieces
a. How to care for various handpieces

Topic 3. The Engine Arm
a. How to change belt on engine arm

DENTAL OPERATORY PROCEDURES

Topic 4. Dental Chair
a. How to care for and maintain the chair

Topic 5. Evacuation (oral)
a. How to select and use evacuation equipment
b. How to care for the evacuator

Topic 6. Instrument and Supply Cabinet
a. How to arrange instruments in cabinet
b. How to care for and maintain cabinet

Topic 7. Sanitization of Equipment

Unit C. Care of the Patient

Objectives: In a role playing situation the student will be able to seat, prepare, and dismiss patients according to the dental procedure indicated by the instructor.

Topic 1. Seating the Patient
a. How to seat the patient
b. How to drape the patient
c. How to dismiss the patient

DENTAL OPERATORY PROCEDURES

Unit D. Operative Procedures

Objectives: The student will be able to apply the principles of all phases of restorative and preventive dental procedures in accordance with accepted practice in the dental community.

Topic 1. Anesthesia
a. How to prepare the syringe

Topic 2. Rubber Dam
a. How to prepare set-up for rubber dam
b. How to assist in placement and removal of rubber dam

Topic 3. Restorative Dentistry

Topic 4. Amalgam Alloy
a. How to prepare amalgam alloy (various methods)
b. How to prepare set-ups for preparation, condensation and carving of amalgam restorations

Topic 5. Synthetic Restorative Materials
a. How to prepare set-up for silicate materials
b. How to prepare silicate materials

Topic 6. Gold Foil
- a. How to prepare set-ups for gold foil restorations
- b. How to anneal gold foil
- c. How to pass gold foil

Topic 7. Cast Gold Restorations
- a. How to prepare set-ups for cavity preparation
- b. How to prepare set-ups for retracting procedures and materials used
- c. How to prepare impression tray
- d. How to load impression tray and syringe
- e. How to prepare set-up for temporary restoration
- f. How to prepare set-up for cementation

DENTAL OPERATORY PROCEDURES

DA 62B DENTAL OPERATORY PROCEDURES 2 Units

Prerequisites: DA 62A

Continuation of DA 62A. Anesthetics, restorative dentistry, prosthetics, endodontics, oral surgery, periodontics, pedodontics, orthodontics, dental health education, emergency and first aid, operative and post-operative procedures, maintaining sterilization standards.

Objectives: To prepare the student to assist the dentist in advanced operative procedures and areas of specialty practices.

Unit A. Operative Procedures

Objectives: To provide competency and skill in the performance of duties.

Topic 1. Prosthetics--Fixed Bridge
a. How to prepare set-ups for the various procedures in fixed bridge prostheses.

Topic 2. Prosthetics--Partial Dentures
a. How to prepare set-ups for partial dentures

Topic 3. Prosthetics--Full Dentures
a. How to prepare set-ups for full denture prosthetics

Topic 4. Endodontics
a. How to prepare set-ups for the various procedures in endodontics

Topic 5. Oral Surgery

Topic 6. Kinds of Anesthetics
a. How to prepare set-ups for the various procedures in oral surgery

Topic 7. Periodontics
a. How to prepare set-ups for the various procedures in periodontics

Topic 8. Dental Public Health Education

Topic 9. Orthodontics
a. How to prepare set-ups for the various procedures in orthodontics

Topic 10. Emergency and First Aid
a. How to assist in an emergency
b. How to assist in artificial respiration

Topic 11. Pharmacology as it refers to above Procedures

Topic 12. Sterilization as it refers to above Procedures

Unit B. Post-operative Procedures

Objectives: To provide knowledge and ability in the follow through of patient dismissal and post-operative duties in the operatory.

Topic 1. Dismissal of Patient

Topic 2. Instruments
a. Scrubbing
b. Sterilization and disinfection
c. Storage

Topic 3. Equipment
a. Clean
b. Lubricate
c. Storage

DENTAL OPERATORY PROCEDURES

DENTAL LABORATORY PROCEDURES

DA 64A DENTAL LABORATORY PROCEDURES 2 Units

Prerequisites: DA 52B, 54

Principles of safety; care and maintenance of equipment, instruments, work areas; types and uses of impression trays.

Lecture -- 1 hour
Laboratory -- 3 hours

Objectives: To develop an understanding of the laboratory procedures performed in the practice of dentistry and to develop skills in performing laboratory techniques which can be effectively accomplished by the dental assistant.

Unit A. Principles of Safety

Objectives: The student will be able to identify and label dental laboratory equipment and materials, and to demonstrate safe procedures for their use, handling and storage in accordance with standards of the California Division of Industrial Safety.

Topic 1. Rules of Safety

Topic 2. Precaution with Chemicals
a. Use and storage
b. Antidotes

Topic 3. Precaution with Laboratory Equipment
a. How to safely use electrical, gas, and mechanical equipment

Unit B. Care and Maintenance of Equipment, Instruments and Work Areas

Objectives: The student will be able to list and demonstrate preventive maintenance, cleaning and care of dental laboratory equipment, instruments and work areas, according to the manufacturer's recommendations and work simplification procedures.

Topic 1. Routine Care

Topic 2. Periodic Maintenance

Unit C. Types and Uses of Impression Trays

Objectives: The student will be able to identify, select or construct impression trays appropriate to the impression technique.

Topic 1. Metal Trays
- a. Identification
- b. Selection for use
- c. How to clean and store

Topic 2. Plastic Trays
- a. How to construct a custom tray
- b. How to modify pre-fabricated trays

Topic 3. Miscellaneous Trays
- a. Identification
- b. Selection for use

DENTAL LABORATORY PROCEDURES

DENTAL LABORATORY PROCEDURES

DA 64B DENTAL LABORATORY PROCEDURES 2 Units

Prerequisites: DA 64A

Preparation and uses of dental waxes and impression materials, models, fixed and removable prostheses, dental laboratory functions and dental laboratory case preparation.

Lecture -- 1 hour
Laboratory -- 2 hours

Objectives: To develop knowledge in the application of dental waxes and their function.

To acquire ability to properly manipulate laboratory materials in the fabrication of dental prostheses.

Unit A. Preparation and Uses of Dental Waxes

Objectives: The student will be able to identify and manipulate dental waxes according to their uses and the manufacturer's recommendations.

Topic 1. Pattern Waxes

Topic 2. Impression Waxes

Topic 3. Processing Waxes

Topic 4. Study Waxes

Unit B. Preparation and Uses of Impression Materials

Objectives: The student will be able to identify and manipulate dental impression materials according to their uses and the manufacturer's recommendations.

Topic 1. Rigid

Topic 2. Thermoplastic

Topic 3. Elastic

Unit C. Kinds and Uses of Models

Objectives: The student will be able to identify kinds of models, material formulas and demonstrate the preparation of models appropriate to their uses.

Topic 1. Materials
a. Review
b. How to mix

Topic 2. Types
a. Identification
b. How to pour

Topic 3. Trimming

Topic 4. Finishing

Unit D. Identification of Artificial Dental Prostheses

Objectives: The student will be capable of identifying the different types of removable prostheses as indicated by the instructor.

Topic 1. Partial Denture--Removable

Topic 2. Full Denture, Maxillary and Mandibular

Topic 3. Materials--Precious Metals, Porcelain, Acrylics

Unit E. Functions of the Dental Laboratory

Objectives: The student will be able to identify and describe the function of the dental prostheses and appliances; list steps of fabrication of dental prostheses according to Accredited Dental Laboratory procedure.

Topic 1. Steps in Crown and Bridge Construction

Topic 2. Steps in Artificial Denture Construction and Repair

Topic 3. Steps in Orthodontic Appliances

Topic 4. Steps in Fabrication of Dental Ceramics and Bonded Porcelain

Unit F. Principles of Preparing Cases for the Dental Laboratory

Objectives: The student will be able to prepare cases for delivery to a commercial dental laboratory in accordance with Accredited Dental Laboratory procedures, and to coordinate dental office appointments with laboratory schedules.

Topic 1. Recording
a. How to control case load
b. Checking prescription for completeness

Topic 2. Packaging

Unit G. Principles of Storing Laboratory Materials and Laboratory Equipment

Objectives: The student will be capable of properly ordering, packaging and storing expendable and non-expendable dental laboratory materials and caring for laboratory equipment according to manufacturers' recommendations.

Topic 1. Storing Laboratory Materials

Topic 2. Storing Laboratory Equipment

DENTAL LABORATORY PROCEDURES

DA 70A SUPERVISED CLINICAL EXPERIENCE 2 Units

Prerequisites: Concurrent registration in DA 60A, 62A, 64A

Clinical dental assisting experience with instructor supervision in such locations as dental schools, clinics, hospitals and selected private dental practices.

Lecture -- 1 hour
Laboratory -- 3 hours

Objectives: The student will be capable of applying acquired knowledge and skills of dental assisting in an actual dental situation under the direction and standard of proficiency established by the supervising instructor.

Unit A. Operative Procedures

Unit B. Surgical Procedures

Unit C. Patient Approach

Unit D. Laboratory Duties

Unit E. Business Procedures

Objectives: Unit A through Unit E above will develop the student's proficiency in performance of assigned duties under standards established by supervisory personnel.

SUPERVISED CLINICAL EXPERIENCE

SUPERVISED CLINICAL EXPERIENCE

DA 70B SUPERVISED CLINICAL EXPERIENCE — 2 Units

Prerequisites: DA 70A

Continuation of DA 70A with emphasis on clinical experience in private dental practices including the specialized areas of dentistry.

Laboratory -- 7 hours

Objectives: The student will be able to apply classroom and laboratory principles in association with punctuality, appropriate emotional attitudes, enthusiasm, and constructive evaluation in the clinical performance of all assigned duties in an actual dental office practice environment.

Unit A. Pre-operative Procedures

- Topic 1. Operative Preparation
- Topic 2. Seating Patient

Unit B. Chairside Assisting

- Topic 1. Operative Procedures
- Topic 2. Prosthetics
- Topic 3. Oral Surgery
- Topic 4. Endodontics
- Topic 5. Periodontics
- Topic 6. Pedodontics
- Topic 7. Examination and Diagnosis
- Topic 8. Orthodontics
- Topic 9. Health Education

Unit C. Post-operative Procedures

- Topic 1. Dismissal of Patient
- Topic 2. Operatory Care
- Topic 3. Sterilization

Unit D. X Ray

Topic 1. Exposure

Topic 2. Processing

Topic 3. Mounting

Unit E. Laboratory

Topic 1. Laboratory Procedures as Indicated within the Supervised Area

Unit F. Office Procedures

Topic 1. Communications

Topic 2. Records

Objectives: Unit A through Unit F -- The student will function in a skillful manner as indicated by the criteria established by the training program, instructor and the dental profession as relating to the advanced practice of dentistry.

SUPERVISED CLINICAL EXPERIENCE

SUMMARY AND RECOMMENDATIONS

This model curriculum is the result of the efforts of many persons interested in dental assisting education working in a variety of settings and with a variety of resources over a period of time. We have seen how the results of these efforts were used by the California State Advisory Committee on Dental Assisting Education to arrive at a plan for the education and training of future dental assistants that is consonant with the demands of modern dental and educational practices. Built into the plan are the ingredients necessary for effecting a smooth, easy transition to the acquisition of new competencies as the art and science of dentistry and education advance and as legislation permits.

In order to implement effectively the plan that is outlined in this model, it is recommended that:

1. The program of instruction should be offered in a collegiate institution and lead to an Associate in Arts (A.A.) or Associate in Science (A.S.) degree.

2. Curriculum prerequisites should be of a nature that will assure high school graduates a reasonable chance for success both in the program and in the profession.

3. Performance criteria, courses and course content should follow the patterns outlined in this paper.

4. The curriculum should provide for about equal amounts of (a) general education and related "pre-clinical" subjects, including a course in applied psychology, and (b) specialized dental assisting courses.

5. Early in the program, and prior to advanced clinical experience, the student should receive orientation experience in a dental school, clinic or private dental office.

6. Third semester supervised experience should be provided in a dental school, dental clinic or hospital with dental facilities wherever possible, and in the fourth semester clinical experience in selected private offices. Advanced clinical experience should involve a variety of experiences in both dental clinics and private dental offices.

7. A planned program of orientation for dental students and practicing dentists should precede the clinical experience of dental assisting students.

8. Adequate supervision of dental assistant trainees is imperative. The following ratio of instructor/supervisor to students is recommended and should be followed as closely as possible: in the dental clinic 1:16; in the private dental offices 1:12.

9. A knowledgeable and competent advisory committee composed of dentists and certified dental assistants should be appointed to assist with the planning, inauguration and implementation of each program.

10. The practice of accrediting dental assisting training programs by the Council on Dental Education of the American Dental Association represents a distinct service to dental assisting education and should be continued.

11. The educators in accredited dental assisting institutions should encourage and provide the opportunity for each student to apply for the certification examination provided by the Certifying Board of the American Dental Assistants Association.

12. The program should be evaluated continuously by staff and local advisory committees in terms of current dental practices.

13. For effective evaluation of student achievement, the topics in DA 62A,B DENTAL OPERATORY PROCEDURES and DA 64A,B DENTAL LABORATORY PROCEDURES, should be utilized.

REFERENCES

SELECTED REFERENCES

1. "A Survey of Dental Assisting Curricula in the California Junior Colleges," PRELIMINARY DRAFT, Bureau of Industrial Education, State Department of Education, Sacramento, California, 1966.

2. "Requirements for the Approval of Educational Programs for Dental Assistants," Council on Dental Education, American Dental Association, 1960.

3. "Survey of Dental Assisting Curricula in the California Junior Colleges, A Supplementary Tabulation of Survey Responses by Schools," Bureau of Industrial Education, State Department of Education, Sacramento, California, 1966.

4. "Dental Assisting Curricula in California Junior Colleges," State Advisory Committee on Dental Assisting Education, Bureau of Industrial Education, State Department of Education, Sacramento, California. To be published in January, 1968.

5. Mager, Robert F., Preparing Instructional Objectives, Fearon Publishers, Inc., Palo Alto, California, 1962.

6. "Policies and Guidelines for the Training of Dental Auxiliaries," Council on Dental Education, American Dental Association, Third Edition, August, 1966.